ABSTRACT

A comparative study of Bacterial Vaginosis among Vitamin – D deficient pregnant women and Normal pregnant women and its impact on maternal and fetal health.

PURPOSE OF THE STUDY :

To estimate the prevalence of Bacterial Vaginosis and Vitamin D deficiency among pregnant population and to identify the association between occurrence of bacterial vaginosis and Vitamin –D deficiency and their impact on maternal and fetal health.

METHODOLOGY :

After obtaining written informed consent, 100 AN mothers age 21 to 35 years in mid gestation period (11 – 26 weeks) attending the AN OPD clinics at Government Coimbatore medical college hospital, Coimbatore enrolled for the study. Each patient visiting our AN OPD enquired about their age, BMI, parity index, chief complaints, detailed menstrual history, Obstetric history, any pelvic pathology and detailed pelvic examination done. Sterile high vaginal swabs were taken for microbiological examination and a non fasting blood sample for analysing serum 25(OH) vitamin D3 level were taken. Patient were treated for the same and are observed throughout the AN period and 6 weeks postpartum. The collected data were compiled and subjected to statistical analysis using statistical package for social services (SPSS) version 15.

RESULTS :

Patient are screened for Bacterial Vaginosis and Vitamin –D deficiency and their association were analysed**.** We found that there is increased prevalence of Bacterial Vaginosis among antenatal mother around 32 %**.**And the prevalence of Vitamin – D deficiency is much higher they are as follows 34% have optimal levels ,36%are insufficient , 18% are deficient , 12 % are severely deficient. We infer that there is a strong positive association with occurrence of gram stain positivity which is diagnostic of Bacterial Vaginosis and the prevalence of Vitamin D deficiency. There is a significant association between maternal and fetal adverse effect in relation to BV, such as 2% Chorioamnionitis, 7% PP Eendometritis, 5% post operative wound infection, 10% prematurity, 7% PPROM, 3% spontaneous abortion. There is statistical significance between prevalence of BV and adverse maternal and fetal outcomes.

CONCLUSION :

This study recommends the screening of both high risk and low risk antenatal mothers for Bacterial Vaginosis. Further evaluation over a period of time with larger sample are needed to find out whether supplementation of vitamin D to reduce the incidence and recurrence of Bacterial Vaginosis and also in prevention of other complication inherent to BV and Vitamin-D deficiency, thereby improving the maternal and fetal outcomes.

KEYWORDS : BV, Vitamin – D, preterm labour , PPROM, PP Endometritis.